

Installing and Configuring

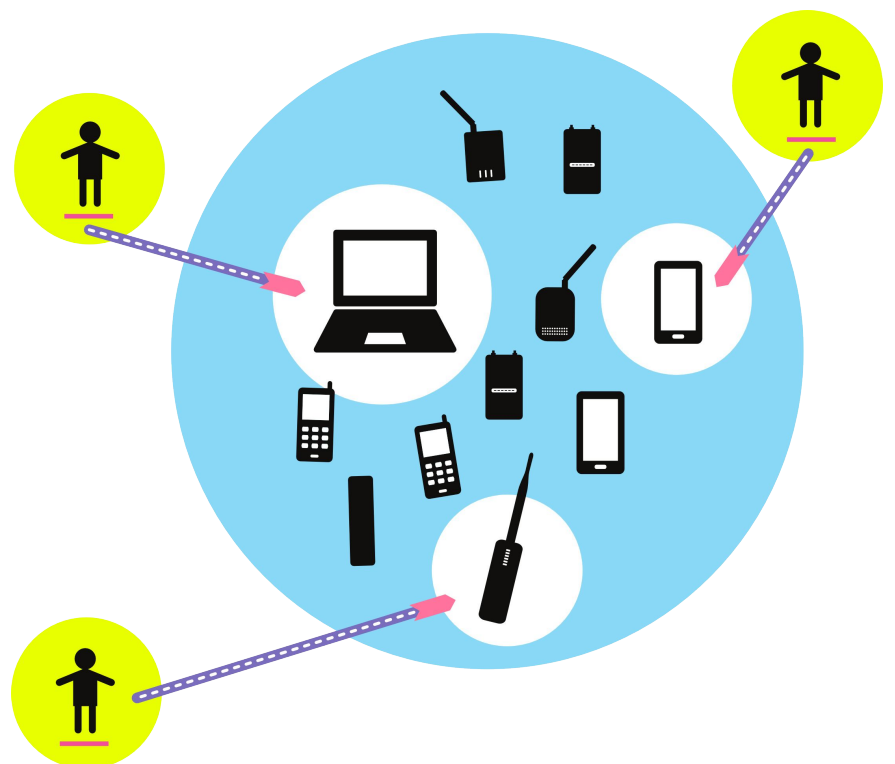
Install on a TP-Link Router

Introduction

This document contains a step-by-step process for installing the Commotion software on TP-Link routers. If you have a new, in-the-box TP-Link device, this guide is for you.

We have written this guide because the Open Technology Institute is expanding Commotion router software support for TP-Link routers. The software is an alternative operating system, similar to Linux for your home or office computer. TP-Link hardware comes from the factory installed with their custom software - just like a new computer usually comes with Microsoft Windows or Mac OSX installed. Installing Commotion on your router instead will add new features to your router, including the ability to mesh with other routers that use Commotion.

The installation process should take about **15 to 30 minutes**. If these steps do not work for you, or if you have a router that failed to properly flash Commotion or will not respond in any way, then please see the **Extra Resources** section.



Materials + Supplies Needed

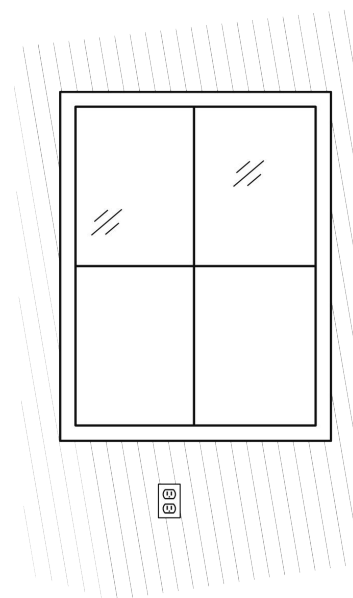
To install Commotion, you will need the following items on-hand:



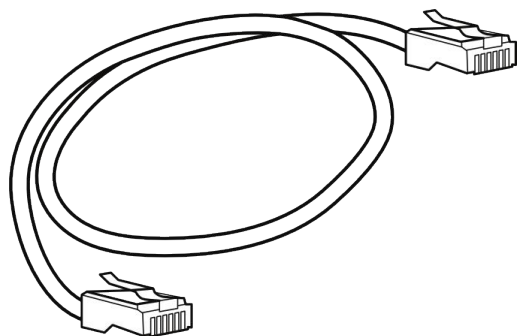
A computer with an Ethernet port.



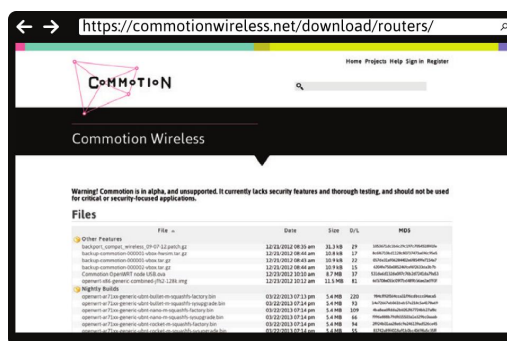
The TP-Link router and its power supply.



Access to a power outlet.



One Ethernet cable.



An Internet connection or the appropriate Commotion software image.

Download Commotion

Download the “Factory” Commotion image for your hardware:
<https://commotionwireless.net/download/routers>

Make sure the TP-Link router model number **and** version match exactly. For example, the Commotion image for the WR842ND V1 will not work on the WR842ND V2!

The screenshot shows the Commotion website's navigation menu with 'DOWNLOAD' highlighted. A dropdown menu is open, showing 'ROUTERS' as the selected option. Below the navigation, there's a section titled 'Download Commotion Router' with icons for Router, Phones, Computers, Cellular Networks, and Verifying Downloads. The 'Router' icon is highlighted. The main content area includes a 'WARNING' box with a list of security warnings: 'Cannot hide your identity', 'Does not prevent monitoring of internet traffic', 'Does not provide strong security against monitoring over the mesh', and 'Can be jammed with radio/data-interference'. Below the warning is a 'Commotion Router' section with a description, instructions, and the current release version 'v1.1 *Grumpy Cat*'. The 'Version 1.1rc2 Downloads' section lists four download options with their signatures, MD5 hashes, dates, and sizes. A 'Verifying Downloads' section explains the use of GPG signatures and provides a link to the 'Commotion Signing Key'.

Commotion Router

Commotion Router is a distribution of OpenWRT Linux that supports the wireless routers listed by vendor below. If you're not sure which file to download, check the full list of [devices we currently support](#).

For instructions on getting Commotion set up on your router, see the [Installation](#) and [Configuration](#) pages. If you are updating from older versions of Commotion (Pre-Release, Developer Release, or 1.0 versions), read through the [Upgrade Guide](#) on our [wiki](#).

The current Commotion release is v1.1 *Grumpy Cat*

Version 1.1rc2 Downloads

Version 1.1rc2 was released in June 2014.

Manufacturer: Ubiquiti

Router	Signature	MD5	Date	Size
Ubiquiti Picostation M2 and Bullet M2/M5 - Factory Install	(sig)	b6047973c87f56ec54abd599e4f09d8e	06-13-14	5.2 MB
Ubiquiti Picostation M2 and Bullet M2/M5 - Upgrade	(sig)	fa8534feab980b451c18aafb91a2cf9	06-13-14	5.2 MB
Ubiquiti Nanostation M2/M5 - Factory Install	(sig)	b1929478043d881cd80b884570c3db47	06-13-14	5.2 MB
Ubiquiti Nanostation M2/M5 - Upgrade	(sig)	9058172429c4d241222ff571bced3163	06-13-14	5.2 MB

<https://commotionwireless.net/download/routers>

Verifying Downloads

We use the best practice of using GPG signatures to sign our downloads. This allows you to verify that the files you download here were released by us if you choose to.

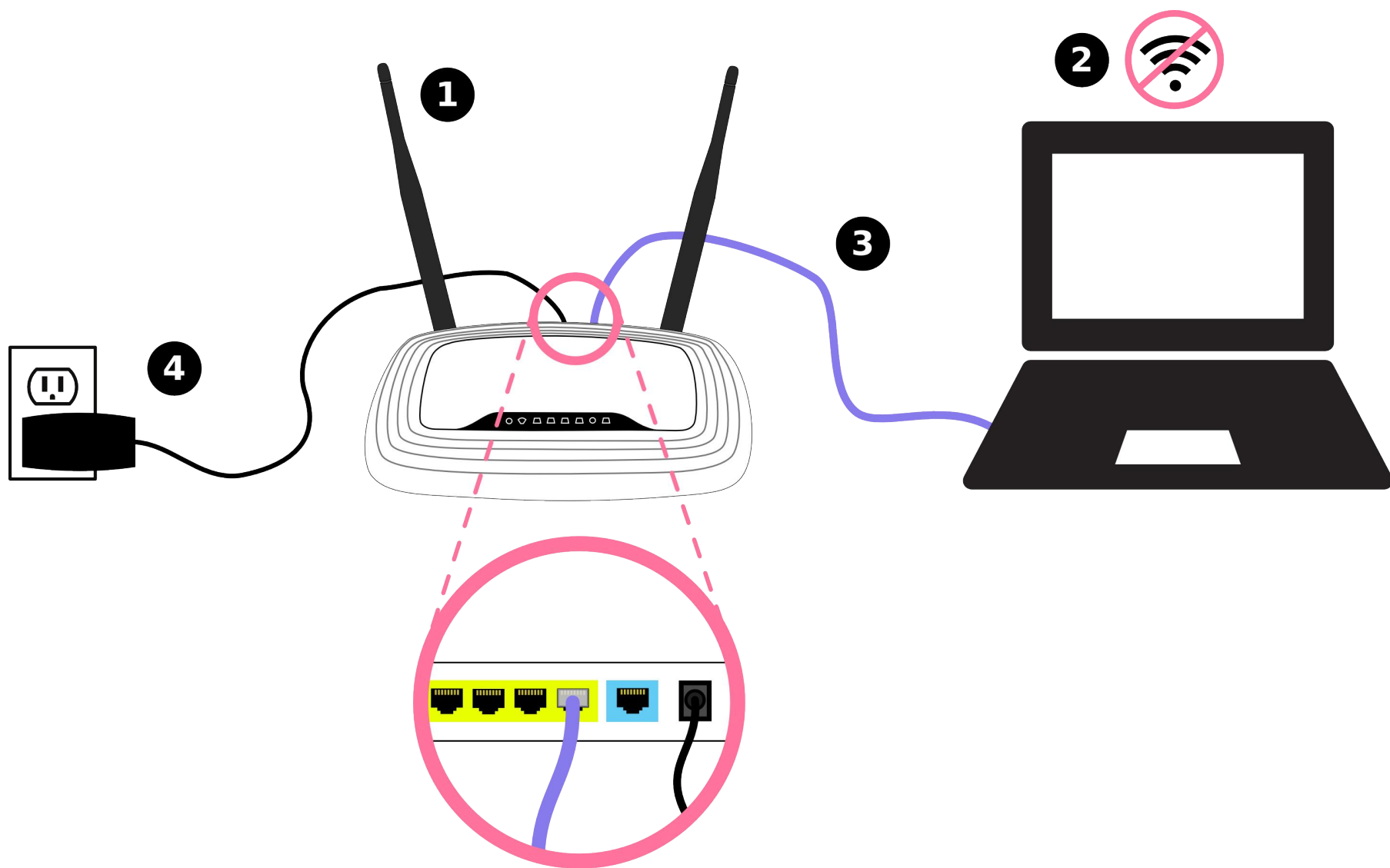
To verify our downloads (optional), you'll need the [Commotion Signing Key](#) and the GPG signature for the downloaded file. This image links to each download's GPG signature:

[Find out more](#) on our [Verifying Downloads](#) page.



Tip: Save the file somewhere you can access easily later. A good place to save the file is on your Desktop, or in your Downloads directory.

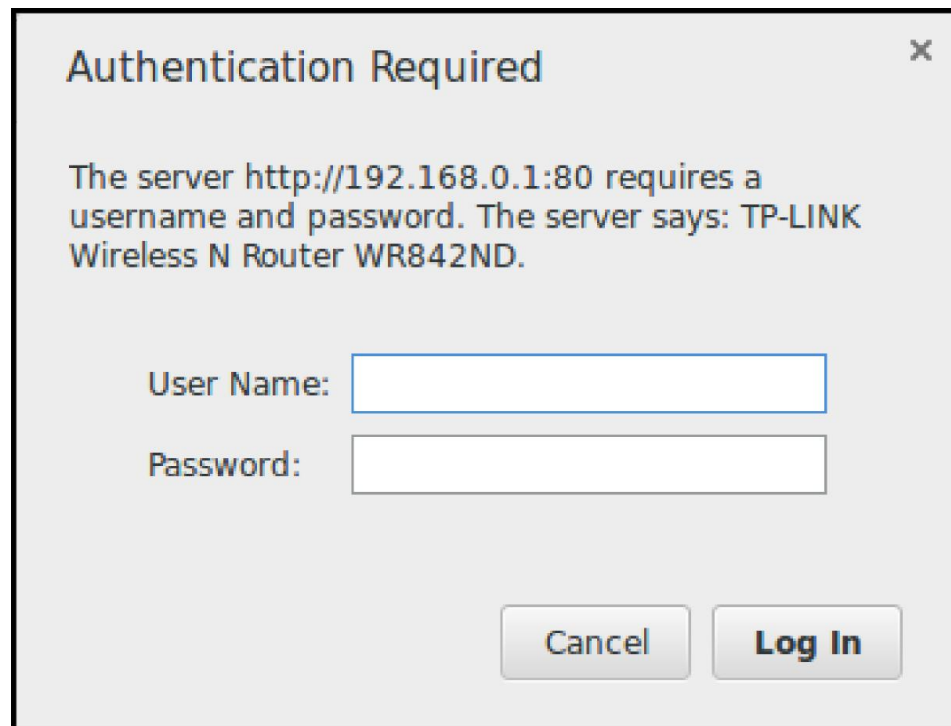
Setup the hardware



1. Unpack the TP-Link router and screw on the external antennas (if the unit has them).
2. Turn off your computer's Wi-Fi, if it is on.
3. Plug the Ethernet cable into one of the switch ports (usually yellow in color), then plug the other end of the cable into your computer's Ethernet port.
4. Plug the power adapter into an easily accessible wall outlet or power strip, then the DC power jack into the back of the router. If there is a power button, depress it to turn the router on.

Load the software

1. Open your Web browser and enter **http://192.168.0.1** in the address bar. This is the IP address of the router. A prompt for an administrator password should appear.



Authentication Required

The server http://192.168.0.1:80 requires a username and password. The server says: TP-LINK Wireless N Router WR842ND.

User Name:

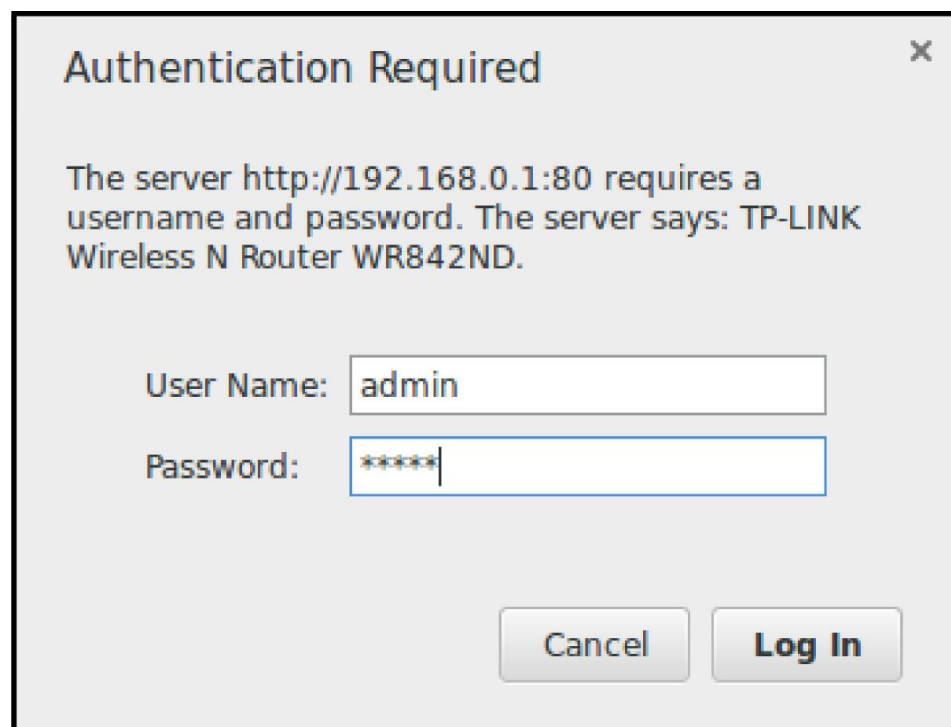
Password:

Cancel Log In

2. Log in to the interface:

Username: admin

Password: admin



Authentication Required

The server http://192.168.0.1:80 requires a username and password. The server says: TP-LINK Wireless N Router WR842ND.

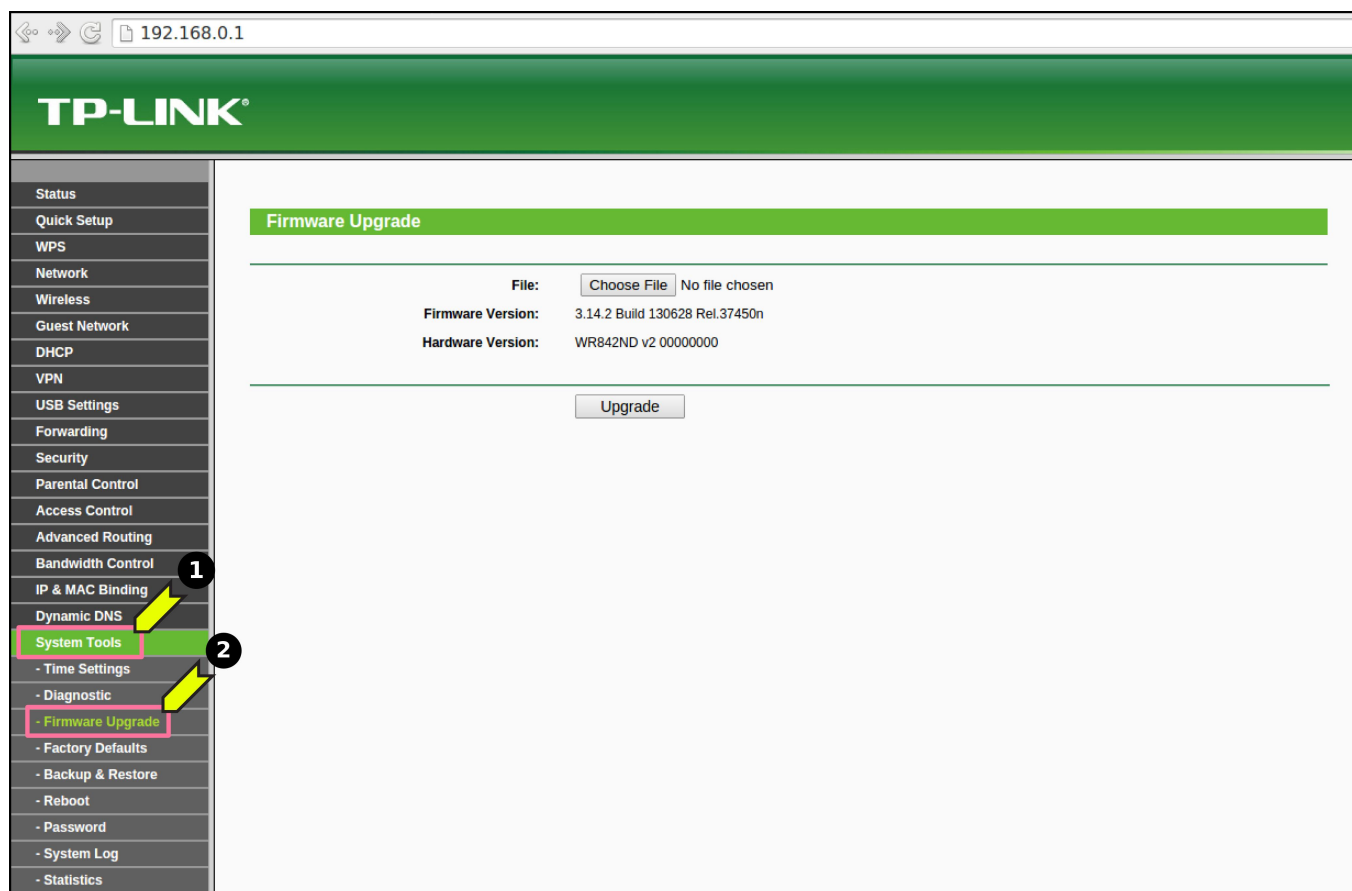
User Name:

Password:

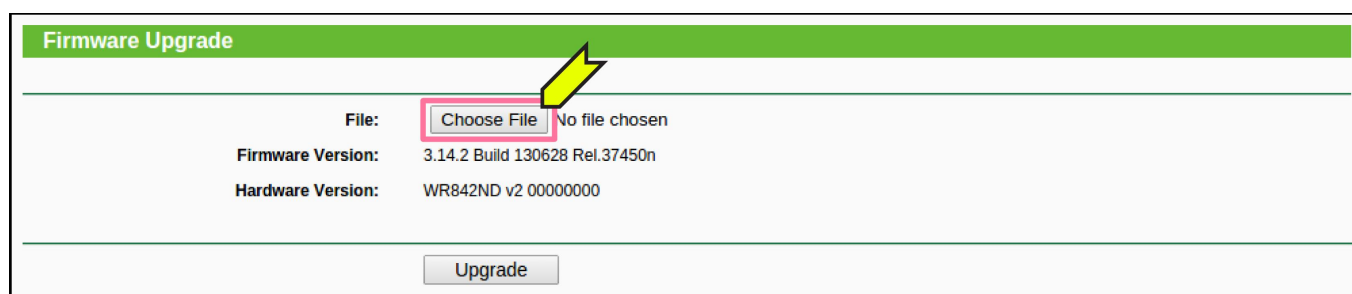
Cancel Log In

Load the software, continued

3. Navigate to the **System Tools** menu and click the **Firmware Update** submenu.

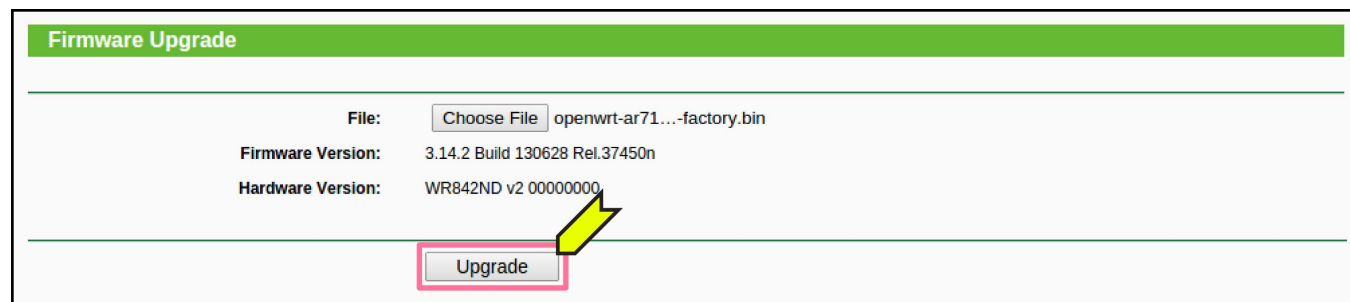


4. Click the “Choose File” button and select the appropriate Commotion “factory” image for your TP-Link router. Make sure the router model number and version match!

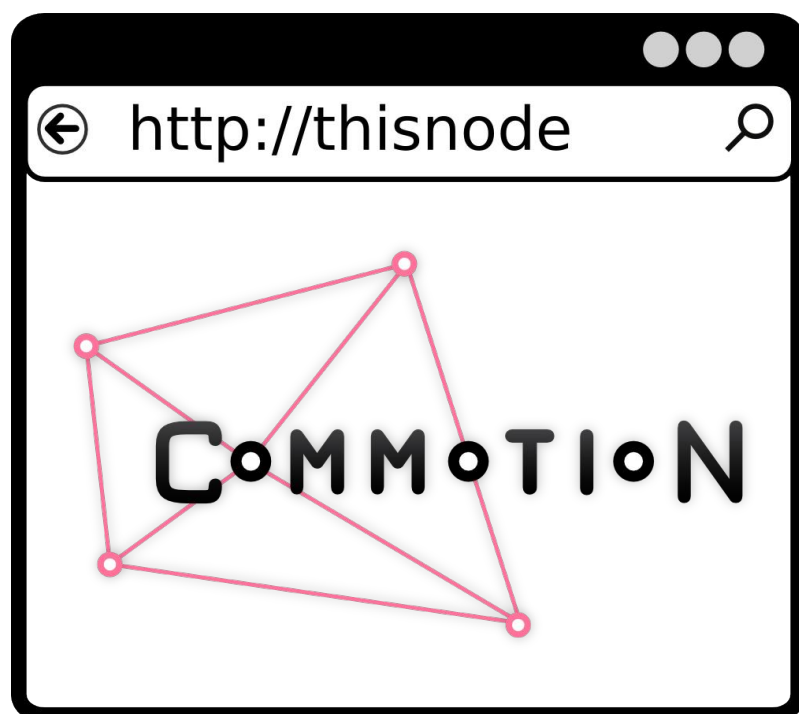


Load the software, continued

5. Click the “Upgrade” button, and select “Yes” when the router asks you to confirm.



6. The router will reboot. Wait a few minutes, and then go to **http://thisnode** in your Web browser. If you see the Commotion screen, congratulations! You now have a Commotion wireless router!



You should continue to the **Configure Commotion** document next. It provides instructions on how to configure the Commotion software for the first time.

Definitions

Operating System

A collection of software that manages computer hardware resources and provides common services for computer programs. The operating system is a vital component of the system software in a computer system.

Firmware

The combination of persistent memory and program code and data stored in it. In other words, a very small and basic operating system for devices like appliances, computers, digital watches, digital cameras, mobile phones, and more.

Related Information

After the software has been installed, you can proceed to the **Configure Commotion** module.

Extra Resources

If you are having trouble, or this guide didn't work for you, you will need to consult the specific installation instructions for your router on the OpenWRT website.

Please proceed to <http://wiki.openwrt.org/toh/start> and search for your router in the list. If you can't find the router in the list, confirm you have the exact TP-Link router model **and** version for the Commotion image. If those do not match, the router firmware may not install or may function incorrectly.